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IN THE CLAIMS

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1. (Previously presented) A receiver (60) for use with one or more antennas (1,2,100), the receiver having: two or more diverse channels fed by the antenna or antennas, two or more adaptive equalizers (20,30, 230), each for equalizing a signal of one of the channels, each equalizer having a set of coefficients, and a coefficient adapter (40) for adapting two or more of the sets of coefficients in a time shared manner, and a combiner (50) for combining the equalized signals.
2. (Previously presented) The receiver of claim 1, the equalizers being arranged to output two or more equalized signal values in consecutive time slots, by reusing the same coefficients, while new coefficients are being calculated for a different one of the equalizers in each of the consecutive time slots.
3. (Currently amended) The receiver of claim 1 or ~~claim 2~~, the coefficient adapter being arranged to use the same algorithm for adapting the coefficients for each of the equalizers.
4. (Currently amended) The receiver of ~~any preceding claim 1~~, the adapter being arranged to use a linear algorithm.
5. (Currently amended) The receiver of ~~any preceding claim 1~~, the adapter having an input of feedback from the combined equalized signal.
6. (Currently amended) The receiver of ~~any preceding claim 1~~, the adapter being arranged to use the signal to be equalized and an estimated wireless path characteristic to adapt the coefficients.
7. (Currently amended) The receiver of ~~any preceding claim 1~~, having circuitry (270,280,290) for demodulating and CDMA decoding of the combined equalized signal.

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8. (Currently amended) The receiver of any preceding claim 1, having circuitry (130,140,150,160) for IF processing of the signals from the antennas.
9. (Currently amended) The receiver of any preceding claim 1, having circuitry (170, 180, 190,200,210,220) for converting the signals from the antennas into complex digital form before equalization.
10. (Currently amended) The receiver of any preceding claim 1, implemented as one or more integrated circuits.
11. (Previously presented) A mobile terminal (70) having an antenna (1,2), the receiver of any preceding claim coupled to the antenna, and a processor coupled to the receiver for processing data received by the receiver.
12. (Canceled)